

Trends in Michigan Household Income, 2000-2005

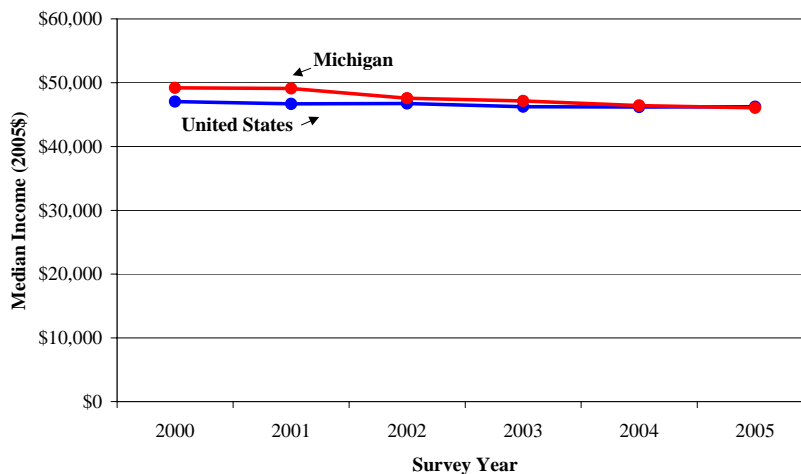
Several recent newspaper reports have cited an apparent 12 percent drop in Michigan's median household income between the 2000 Census and the 2005 American Community Survey (ACS).

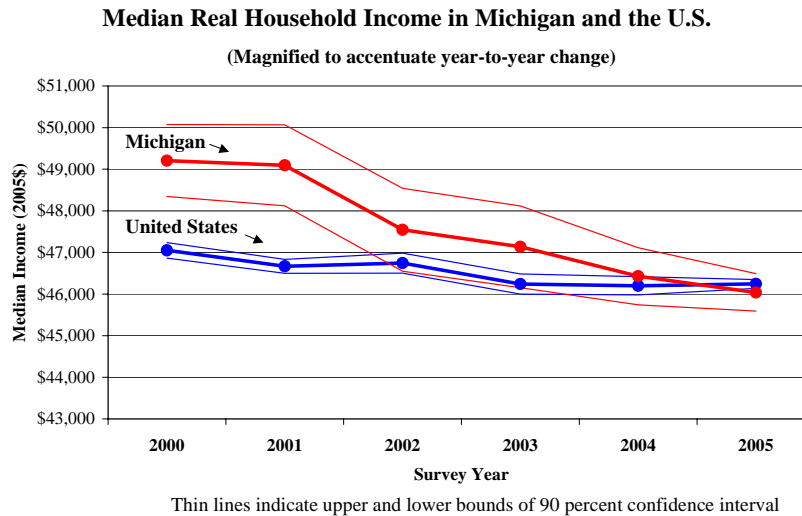
A more careful comparison suggests that the drop has been considerably smaller than 12 percent, and that key components of income in Michigan have been fairly stable over the past few years after adjusting for inflation.

One major source of confusion is that income figures from the ACS are not fully comparable to figures from the census. The methodology used in the ACS produced lower income figures than the census even in 2000, when the survey overlapped the time period in which the census was conducted. After adjusting for inflation, median incomes from the 2000 survey were 4.4 percent lower than the corresponding census figures for the U.S. as a whole, 6 percent lower for Michigan, and up to 8 percent lower in other states. Forty-seven out of fifty states had lower medians in the 2000 survey than in the 2000 Census. ([Click here for further discussion of differences between income data from the census and the ACS.](#))

It is therefore more valid to compare new ACS data to data that was collected through the same methodology in prior years. A comparison of "real" median income figures from the ACS (i.e. figures that have been adjusted for inflation based on the Consumer Price Index) is presented in the two charts below. The first chart illustrates the magnitude of the change, while the second chart is magnified to accentuate changes from year to year and to permit the 90 percent confidence intervals to be displayed.

Median Real Personal Income in Michigan and the U.S.





Observations:

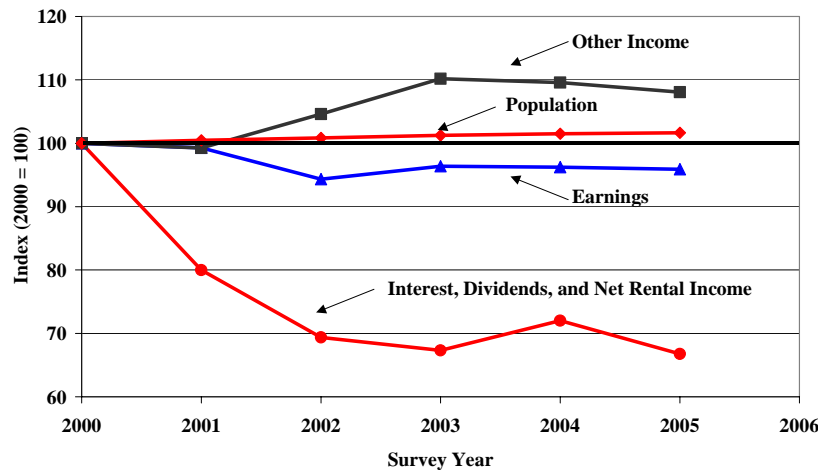
- As measured by the ACS, Michigan's real median household income has dropped by about 6 percent between 2000 and 2005. That is half as much of a drop as has been reported in recent news stories.

(The 90 percent confidence interval for this measurement is from 3.8 percent to 9.0 percent. In other words, there is a 90 percent likelihood that the measured decline would fall between 3.8 and 9.0 if the surveys had been conducted with the entire population instead of just a sample.)

- About half of the estimated drop appears to have occurred between 2001 and 2002.
- Michigan's median household income was higher than the national median in 2000 and 2001. However, the difference from the national median has not been statistically significant at the 90 percent level since 2002.
- The difference between Michigan's 2005 median and its 2002 median is statistically significant—the top of the confidence interval for 2005 is just barely below the bottom of the confidence interval for 2002. However, the changes measured since 2003 have not been statistically significant. In other words, the changes from 2003 to 2005 and from 2004 to 2005 have been too small to be identified reliably by a survey of this size.

The American Community Survey also measures trends for individual components of household income. The chart below is based on aggregate real income, which is the sum of the inflation-adjusted incomes of all Michigan households. Trend lines are shown for population and for three broad components of income.

Trends in Michigan's Aggregate Real Income: 2000-2005



Observations:

- Aggregate real earnings in Michigan (i.e. wages, salaries, and income from self employment) dropped considerably between 2001 and 2002—a measured decrease of 5 percent over a one-year period, which is statistically significant.
- The level of real earnings in Michigan has been fairly stable since 2002—a measured increase of 2 percent, which is not statistically significant. This increase in earnings has been partially offset by an estimated population increase of almost 1 percent during this period.
- Income from interest, dividends, and rent has dropped very substantially, particularly from 2000 to 2002. Decreases in this component account for about 45 percent of the overall drop in Michigan's aggregate real income between 2000 and 2005.
- Other income has increased considerably—a measured increase of 8 percent from 2000 to 2005, after adjusting for inflation, which is statistically significant. This category includes Social Security, retirement income, Supplemental Security Income (SSI), public assistance, and other transfer payments. Social Security and retirement income account for over 80 percent of this category. Increases in these components of income may reflect movement of workers out of the labor force through early retirement arrangements.

It should be noted that several components of income are not included in data from the Census or the American Community Survey, such as: capital gains, money received from the sale of property, in-kind income such as food stamps or housing subsidies, money received from relatives living in the same household, and lump-sum receipts such as inheritances, insurance payments, and gifts.

-- Kenneth Darga, State Demographer
DargaK@michigan.gov

Library of Michigan / LDDS
Department of History, Arts, and Libraries
September 15, 2006